

CLAIMS

1. (Cancelled)
2. (Currently Amended) A method of increasing the ion exchange capacity of ion exchange resin according to Claim 1 ~~24~~, wherein the step of applying a magnetic field to the resin bed during the ion exchange process comprises applying a varying magnetic field to the resin bed.
3. (Cancelled)
4. (Currently Amended) A method of increasing the ion exchange capacity of ion exchange resin according to Claim 3 ~~6~~, wherein the electrical current varies as a sine wave.
5. (Currently Amended) A method of increasing the ion exchange capacity of ion exchange resin according to ~~Claim 3, wherein the electrical current is~~ in an ion exchange column, comprising the step of placing a coil of wire around the ion exchange column and causing a pulsed D.C. current to flow through the coil of wire to create a varying electromagnetic field in the resin bed during an ion exchange process.
6. (Currently Amended) A method of increasing the ion exchange capacity of ion exchange resin according to ~~Claim 3, wherein the step of applying~~ in an ion exchange column, comprising the steps of placing a coil of wire around the ion exchange column and causing a varying electrical current to flow through the coil of wire to create a varying magnetic field to ~~in~~ in the resin bed during the ion exchange process ~~additionally includes the step of ; and~~ and providing a core of magnetic material in the resin bed to direct the magnetic field to the resin bed.
7. (Currently Amended) A method of increasing the ion exchange capacity of ion exchange resin according to Claim 2 ~~24~~, wherein the step of applying a varying magnetic field to the resin bed during the ion exchange process includes the step of moving at least one magnetic device with respect to the resin bed.
8. (Original) A method of increasing the ion exchange capacity of ion exchange resin according to Claim 7, wherein the step of moving at least one magnetic device with respect to the resin bed includes the step of rotating at least one magnet around the ion exchange column and resin bed.

9. (Currently Amended) A method of increasing the ion exchange capacity of ion exchange resin according to Claim 1 24, wherein the step of applying a magnetic field to the resin bed during the ion exchange process comprises positioning at least one stationary magnet with respect to the ion exchange column to create a magnetic field in the resin bed in the column.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (New) A method of increasing the ion exchange capacity of ion exchange resin in an ion exchange column, comprising the steps of applying a magnetic field to a bed of ion exchange resin during an ion exchange process; and providing a core of magnetic material in the resin bed to direct the magnetic field to the resin bed.